

SYSTEM AND METHOD FOR SIMULTANEOUS MEDIA PLAYOUT

ABSTRACT OF THE INVENTION

5 A system and method have been provided for achieving simultaneous media playout in a network including a server and a plurality of clients. The method comprises: from a server, supplying a media stream to clients at a first bitrate (R_1); determining the network delivery requirement; and, in response to the network delivery
10 requirements, modifying the supply of the media stream.

 Determining the network delivery requirements includes determining either the buffering capacities of the clients, or the media streaming disruptions. To determine the buffering capacities of the clients, a first minimum client buffering capacity (C_1) is determined
15 by polling the clients for their respective buffering capacities, and selecting the first minimum buffering capacity (C_1) to be equal to the client with the smallest buffering capacity.

 The method further comprises: following the supplying of media stream at a first bitrate (R_1), changing clients in the network;
20 determining the new minimum client buffering capacity (C_{new}); and, in response to the new minimum buffering capacity (C_{new}), modifying the supply of the media stream. The supply of the media stream is modified by temporarily pausing the supply of the media stream at the first bitrate (R_1) if the new minimum buffering capacity (C_{new}) is
25 less than the first minimum buffering capacity (C_1). Alternately, the media stream bitrate is temporarily increased if the new minimum buffering capacity (C_{new}) is greater than the first minimum buffering

